What Is Claimed Is:

1. A circuit configuration for inductive displacement measurement using a sensor whose inductance changes as a function of the displacement to be measured, and having an evaluation circuit to which the sensor is connected, wherein the sensor (L1) is connected between a first operational amplifier (OPV1) and a series connection of a second operational amplifier (OPV2) and a resistor (R1); the first operational amplifier (OPV1) being optionally able to be switched over between two specified voltages (U3 and U4) and the second operational amplifier (OPV2) adjusting a specified constant voltage (U5) at the connecting point between the resistor (R1) and the sensor (L1), and the output of the second operational amplifier (OPV2) is connected to an input of a comparator (OPV3) whose other input is able to be switched over between two specified voltages (U6, U7); the output signal (U2) of the comparator (OPV3) effecting the switchover of these voltages (U6, U7) and the voltages (U3, U4) of the first operational amplifier (OPV1), and is the measuring output signal (U2) of the circuit configuration at the same time.

2. The circuit configuration as recited in Claim 1, wherein, for the switchover of the specified voltages (U3, U4; U6, U7) of the first operational amplifier (OPV1) and of the comparator (OPV3), controllable switches (S1, S2) are provided whose control inputs are respectively connected to the output of the comparator (OPV3).

3. The circuit configuration as recited in Claim 1 or 2, wherein an input of the second operational amplifier (OPV2) is connected to the common connecting point of the resistor (R1) and the sensor (L1).

4. The circuit configuration as recited in one of Claims 1 through 3, wherein an input of the first operational amplifier (OPV1) is connected to its output.

5. The circuit configuration as recited in one of Claims 1 through 4, wherein, for the measurement of the temperature of the sensor (L1), in each case a constant, but different voltage (U9, U8) is applied to both terminals of the sensor (L1), and after a constant current through the sensor (L1) is achieved, the voltage drop at the resistor (R1) is evaluated as the measured variable for the temperature-dependent, Ohmic resistance of the sensor (L1).

6. The circuit configuration as recited in Claim 5, wherein, for the application of the constant, but different voltages (U9, U8), controllable switches (S3, S4) are provided, which are able to be controlled by a microcontroller (μC).

7. The circuit configuration as recited in one of Claims 1 through 6, wherein a plurality of sensors (L1...L3) are connected with one terminal in common to the resistor (R1), the respectively other terminal of the sensors (L1...L3) being connected to an assigned operational amplifier (OPV1, OPV4, OPV5), whose one input is connected in each case to an assigned, controllable switch (S5, S6, S7), which is in each case controllable by a microcontroller (μC); in each case only one sensor being activated and the remaining sensors are deactivated by the same voltage (U5) being applied to both its terminals.

8. The circuit configuration as recited in one of Claims 1 through 6, wherein a plurality of sensors (L1...L3) is connected to one terminal in common to the resistor (R1), the respectively other terminal of the sensors (L1...L3) being connected to an assigned operational amplifier (OPV1, OPV4, OPV5), whose one input is connected respectively to an assigned, controllable

switch (S5, S6, S7), which is then controllable by a comparator (OPV4) in such a way that a sensor that is to be deactivated has the same voltage applied to it at both its terminals when no current flows through it any more.